Amendments to the Specification

Paragraph at page 10, lines 4 to11

In addition to sensing the relative movement between body 4 and slide tracks 8, the present invention suspension system can optionally mount another sensor ~~52~~ 53 to vehicle 2 for measuring the weight placed on body 4, such as for example by the rider or riders. Upon sensing this weight, sensor ~~52~~ 53 provides an output signal to processor 38, which then automatically adjusts the relative distance separating body 4 and frame 6 by regulating the amount of fluid provided to fluid cylinders 14 and 16, thereby effecting the optimum ride for the given weight sensed. The presumed optimal cushioned ride for a given weight of course can be preset or predetermined.

Paragraph bridging pages 11-12

Fig. 3 is a perspective view of an exemplar frame 6 of the instant invention snowmobile illustrating in particular the suspension system thereof. As shown, slide tracks 8a and 8b are coupled to frame 6 by conventional means such as links, rods, nuts and bolts. Frame 6 in turn is comprised of support bars 56a and 56b that support a spindle about which guide wheels 20a and 20b are mounted. For the exemplar embodiment frame of Fig. 3, two torsion springs 58a and 58b are mounted about the spindle of guiding wheels 20a and 20b. Also mounted to this spindle is one end of fluid actuated cylinder 16, which other end is mounted to the base of frame 6. In place of torsion springs 58a and 58b, it should be appreciated that rigid rods that couple the spindle to the lower portion of frame 6 may also be used. Such rigid rods would in essence be positioned relatively in parallel to support bars 56a and 56b.

Paragraph bridging pages 12-13

The construction of an exemplar fluid actuated cylinder of the instant invention is shown in greater detail in Figs. 4a and 4b. For this discussion, assume that the fluid actuator cylinder of Figs. 4a and 4b represents fluid actuator cylinder 14 shown in Fig. 2 so that the same components are designated with the same numbers. As shown, fluid actuated cylinder has a first end 14a and a second end 14b. Further shown is the inlet port 14c through which fluid is provided to and taken out of fluid cylinder 14. As best shown in Fig. 4b, a portion of the fluid actuated cylinder comprises a shock isolator 62 having portions 62a and 62b that interact with each other on the load. As best shown in Fig. 4a, a rubber isolator such as that made by the Firestone company under part No. 7010 is integrated about the upper portion of portion 62a. This rubber isolator, designated ~~54~~ 64 in Fig. 4a, is attached to portion 62b by means of a threaded portion 66. The upper end of isolator 64 in turn is coupled to a collar 68 of portion 62a. Needless to say, isolator 64 is secured to body 62 in a gas-tight fashion so that any fluid provided therein remains in the interior of isolator 64. Moreover, it should be noted that isolator 64 is made of a rubber that has a sufficiently strong characteristic so that if sufficient fluid, pressurized or otherwise, is provided therein, end 14a and end 14b are movable relative to each other by the expansion of isolator 64. The amount of isolation, or stiffness, provided is dependent on the amount of fluid input to the chamber 70 of isolator rubber 64. Thus, when filled with fluid, piston 72 of absorber 62 is moved relative to end 14b, thereby effecting an extension of fluid actuated cylinder 14. For the embodiment shown in Fig. 4a, the fluid used could be either air or gas. Of course, properly reconfigured, instead of a gas or air actuated device, fluid actuator cylinder 14 could be driven by hydraulic oil and/or other incompressible fluids.